

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/045262 A2

(51) International Patent Classification⁷:

F16B

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/US2004/035796

(22) International Filing Date: 28 October 2004 (28.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/516,488 31 October 2003 (31.10.2003) US

(71) Applicant (for all designated States except US): GKN SINTER METALS, INC. [US/US]; N112 W18700 Mequon Road, Germantown, WI 53022 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KNOTT, Henry, J. [US/US]; 5406 Scott Court, Ypsilanti, MI 48197 (US).

(74) Agent: FRANZINI, John, D.; Quarles & Brady LLP, 411 E. Wisconsin Avenue, Milwaukee, WI 53202 (US).

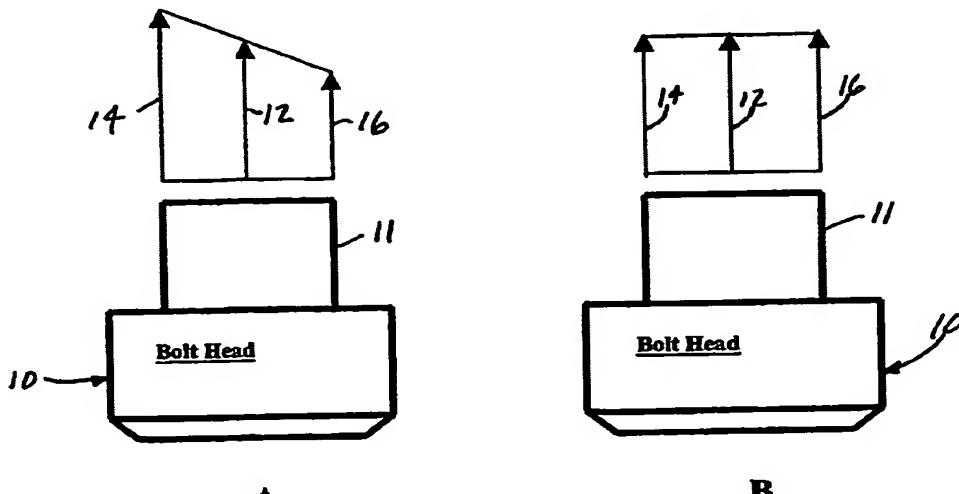
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FASTENER PRE-STRESSING JOINT



(57) Abstract: Fastener joints induce static pre-stresses into a fastener that clamps the joint in a magnitude equal and direction opposite from bending stresses induced in the fastener by application loading. Such joints include angling the bolts seats of a connecting rod bearing cap inwardly, creating a relief at the bolted interface between the cap and the rod adjacent to the main bore of the connecting rod or skewing the threaded holes in the rod body inwardly as they extend from the bolted joint faces.

WO 2005/045262 A2